

## **REMARKS**

Claims 1-8 and 34-49 are pending in this application. Claims 2-8 and 34-43 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Each of these claims has been amended to address the rejections.

Claims 1-8 and 34-49 are rejected under 35 U.S.C. §102(e) as being anticipated by Patent No. 6,282,522 B1 to *Davis*.

### **Introduction**

The Office action cites the *Davis* reference for disclosing a virtual smart card database, a smart card emulator, and a pseudo card reader, all elements recited in the independent claims. *Davis* teaches using a physical smart card 5 to make purchases over a payment system utilizing the Internet. The specification in *Davis* does state that the functionality of the card may be “implemented in software on a client terminal, that is, the card may be a ‘virtual’ card.” [col. 11, lines 13-14]. This is the only instance where the term “virtual card” is mentioned in *Davis*. The rest of the specification focuses on implementing a payment system using a physical smart card.

But, the claims also recite a “virtual smart card database” and a “pseudo card reader module.” Applicant asserts that *Davis* does not teach or disclose either of these elements. Although *Davis* describes various hardware components in an Internet payment system, such as a card reader, a payment server, a merchant server, among others, none of these hardware components anticipate under §102(e) a pseudo card reader module (in contrast to a physical card reader) nor do they anticipate a virtual smart card database.

### **Pseudo card reader module**

*Davis* clearly shows a physical smart card and a physical smart card reader, for example, as shown in Figures 4 and 16. By contrast, claim 1 requires “a pseudo card reader module” that is not a physical card reader. Support for this assertion is found at various places in the present specification. For example, Figure 3, introduced at page 16, states “System 250 dispenses with the need for card reader 210 and smart card 5.” Further, page 17, second full paragraph, provides

"server 260 emulates the physical smart card through the use of pseudo card reader module 264, smart card emulator 266, hardware security module 268 and card database 270." Thus, no physical smart card or physical card reader is used.

Further, claim 1 specifically requires "a pseudo card reader module that receives said smart card commands over said network and relays said commands to said smart card emulator." As described in the specification at page 19, final paragraph, a pseudo card reader module "is a software module that performs the functionality of a physical card reader so that emulation of a smart card is transparent to client code module 224." Thus, the claimed pseudo card reader module is software whereas Davis only discloses a physical card reader.

The Office action alleges that a pseudo card reader module is shown at column 7 of Davis, but this section clearly discloses a physical card reader into which a physical card is inserted. Further, the citation to column 8 only discloses a physical security card. The citation to column 10 only discloses physical stored value cards and security cards that can only be inserted into a physical card reader. The final citation to column 11 likewise only discloses a physical security card.

Furthermore, *Davis* describes how its card reader must be physical, rather than a software module: a "card reader interface 24" includes software and hardware necessary for communications with a card reader as shown in Figure 1. It is described as having, for example, a contact interface in which signals from a microcontroller are routed to a number of metal contacts on the outside of the physical smart card which come in physical contact with similar contacts of a physical card reader. The reference describes contexts in which a cardholder "inserts his or her card into a card reader attached to a personal computer." (*see e.g.*, col. 7, lines 6-21). This is one example of how the physical card reader is described in *Davis*. Therefore, the "pseudo card reader module" recited in the claims cannot be anticipated under §102(e) by *Davis*.

For all these reasons, it is respectfully submitted that Davis does not disclose "a pseudo card reader module" as required by claim 1, and it is requested that the rejection be withdrawn.

### Virtual smart card database

Claim 1 further requires "a virtual smart card database" where each record includes a virtual card identifier and a balance that corresponds to a single virtual smart card. An example of such a virtual smart card database is shown in Figure 4. The Office Action relies upon a citation to column 10, but this section only discloses a payment server that manages the database 223. Database 223 is a transaction database (see column 14, line 9) that stores transaction records; it is not a database that includes records where each record corresponds to a virtual smart card having a balance. The citation to column 11 only discloses a processor card (another name for a smart card) that has a number of functions; this section does not disclose a virtual smart card database. The citation to column 13 discloses a payment module that logs results; this is not a virtual smart card database. The citation to column 16 refers to data from a smart card and a draw or request which is a software message; neither of these sections disclose a virtual smart card database.

Therefore, Applicant asserts that the "virtual smart card database" is not anticipated under §102(e) by *Davis*.

### Smart card emulator

*Davis* does not teach or suggest "a smart card emulator" as required by claims 1 and 41 because there is no enabling description of a "smart card emulator" in *Davis*. The Final Office action states that any disclosure in a reference may serve as anticipatory prior art (Final Office action dated May 9, 2006, page 9). Specifically, the Office action asserts that "...any disclosure serves as prior art and the disclosure as part of the *Davis* description that other forms including a virtual card may also be one means of the invention (column 11, lines 10-14), establishes a virtual card as prior art within the disclosure of the invention and the description of functionality therein."

Applicant maintains its position that the proper standard for a reference serving as a basis for anticipation is that the disclosure be enabling in order to be anticipatory. Section 2121.01 of the MPEP states that "the standard test is whether a reference contains an enabling disclosure," and that "mere naming or description of the subject matter is insufficient, if it cannot be produced without undue experimentation." Applicant believes that the brief mention of a "virtual card" in *Davis* falls

short of providing an enabling description of a “virtual smart card” as described and claimed in the present application and is not a suitable §102(e) reference for anticipation. Recitation of this single phrase fails to enable a concept as complex as using software to emulate a smart card.

Conclusion

Because the Final Office Action has used a legally incorrect standard for anticipation, it is requested that the Final Action be withdrawn and that a new action be issued using the correct standard, or that a new search be performed. Applicant notes that pursuant to §103(c)(1) since *Davis* is cited as a §102(e) reference and is owned by the same Applicant of the present application, it may not be used to preclude patentability under §103(a).

Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,  
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